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FELLOWSHIP PAPER

PROTECTING THE HOMELAND BY EFFICIENT PHASE 0 OPERATIONS IN THE CARIBBEAN, CENTRAL, AND SOUTH AMERICA

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Introduction

The Caribbean, Central, and South America are located very close geographically to the United States (U.S.) homeland. It is imperative to national security to continue cultivating relationships with critical partners to maintain freedom of movement in this region. The expeditionary ground medical capability of the Air Force Medical Service (AFMS) through Global Health Engagement (GHE) is utilized to build partnerships and increase the ability of the United States to maintain freedom of action. Increased partner capacity within an Area of Responsibility (AOR) has the potential to build a medical bridge to peace, raise public opinion, and move countries who might have otherwise been hostile to become U.S. allies.[1]

Phase 0 operations are designed to shape the operating environment and to prevent and prepare for contingencies. The Phasing Model is shown in Figure 1.[2] As Phase 0 operations move to the forefront of strategic military operations, and as the AFMS moves forward to support the warfighter in meeting the emerging challenges and demands of the future battlefield, there must be an increasingly strategic focus on how to achieve U.S. security objectives to protect the homeland with "low-cost and small-footprint approaches."[3] The purpose of this paper is threefold. First, this paper seeks to stimulate thought on the importance of maintaining robust Phase 0 operations during a time of fiscally constrained resources. Second, it will analyze two strategic disconnects between how the AFMS conducts GHE at the tactical level, and how during execution this may not always be aligned with

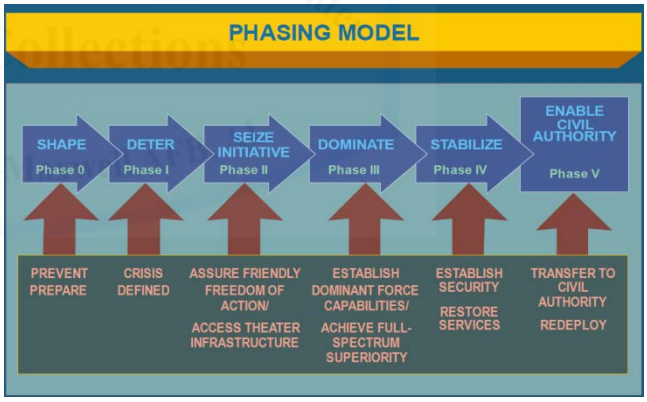

Figure 1: Phasing Model

[1] Health Readiness Concept of Operations (CONOPS), 21 Jan 10.
[2] Joint Publication 3-57, Civil-Military Operations, 8 Jul 08.
[3] Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, Jan 12.

objectives set forth in national security strategy. Lastly, this paper will tie in how GHE during Phase 0 operations within the SOUTHCOM AOR contributes to protecting the U.S. homeland and winning the war in an Anti-Access/Area Denial (A2/AD) environment.

Maintaining Robust Phase 0 Operations

According to Military Health Support for Stability Operations Department of Defense Instruction (DODI 6000.16, 17 May 2010), "Medical Stability Operations (MSO) are a core U.S. military mission that the DOD Military Health System (MHS) shall be prepared to conduct throughout all phases of conflict and across the range of military operations, including in combat and non-combat environments." It also states, Medical Stability Operations are to be given priority comparable to combat operations.[4] Additionally, the Chief of Staff of the Air Force stressed the importance of developing tomorrow's expeditionary airmen to "have sufficient capability and depth in foreign area expertise" and the reality of operating in future contingencies will "require a deeper understanding of our international security environment." He further stressed, those airmen having "international skills are true force multipliers and essential to our ability to operate globally."[5] Within the AFMS, this is precisely the work the International Health Specialist (IHS) community engages in on a daily basis across the range of military operations. The range of military operations can be viewed in Figure 2, which displays military engagement spanning entirely across the conflict continuum.

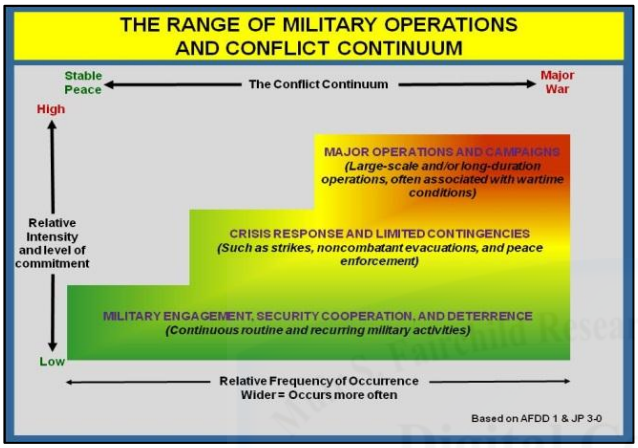

Figure 2: Range of Military Operations

The Air Force Research Institute (AFRI) conducted an in-depth analysis to determine

[4] Military Health Support for Stability Operations, DODI 6000.16, 17 May 10
[5] CSAF, *An Expeditionary Language*, Chief's Sight Picture, 26 Aug 02

what critical capabilities are going to be necessary to meet these future challenges through the year 2030. "Its findings suggest the Air Force should focus on five critical capabilities over the next two decades: (1) power projection, (2) freedom of action in air, space, and cyberspace, (3) global situational awareness, (4) air diplomacy, and (5) military support to civil authorities (MSCA)."[6] The AFMS role falls under more than one of these critical capabilities when providing medical support to the warfighter. Phase 0 operations and GHE fall primarily within the context of air diplomacy.

The AFMS can anticipate the DOD to significantly increase its capacity building operations in the near future with global partners around the world. In President Barack Obama's cover letter to *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, January, 2012, he directs us to "join with allies and partners around the world to build their capacity to promote security, prosperity, and human dignity."[7] After more than two decades of war in Iraq and Afghanistan and now operating under extreme fiscal constraints, a major shift can be expected in the way the DOD prioritizes and conducts operations. This shift will drive new or revised mission sets for each of the military services. Over the next fifteen to twenty years, the Air Force could expect air diplomacy and sequentially AFMS GHE to gain more attention as this mission set becomes progressively noteworthy. The future force structure of the Air Force has already begun to change with significant budget cuts and manning reductions. The AFMS will continue to do more with less moving into future operations yet still must be able to meet future challenges and ensure victory. In order to adequately support optimal GHE operations within the Caribbean, Central, and South America, there will first need to be

[6] Gen John A. Shaud, USAF, Ret. & Adam B. Lowther, *Air Force Strategic Vision for 2020-2030*, Strategic Studies Quarterly, Spring, 2011

[7] James Roberts, Building the Capabilities and Capacity of Partners: Is This Defense Business?, PRISM, Vol 4, No 2, 2013

sufficient funds programmed to further the mission of building partner nation capacity. As defense spending dwindles, air diplomacy employed during Phase 0 operations before a conflict begins will remain a viable and fiscally responsible option for deterring warfare, while simultaneously allowing the U.S. to build relations, increase partner nation capacity, and maintain long-term access in certain areas where combat power could be projected in the future.[8]

The quote below from the 2011 Global Partnership Strategy emphasizes the importance of considering activities such as GHE in Phase 0 operations for building partnerships and sharing expertise during times of resource constraints to promote Security Cooperation (SC).

> These relationships enable the achievement of strategic end states through a variety of means enumerated later in this document. Cultivating these partnerships broadens U.S. access in times of need, strengthens national and regional effectiveness, and increases combined U.S.-partner effectiveness through specialization and shared expertise. Operating in the international context, particularly in partnership with foreign governments, institutions, and airmen, is an inherently cross-cultural endeavor. Accommodating this new reality will require the USAF to account for the impact of varying levels of SC activities on future resource decisions in an increasingly resource constrained environment. Any operational risk assessments must be made in the context of the broader national security spectrum of activities.[9]

As Shaud and Lowther explain, "it is also a cost-effective approach that does not create the anti-American sentiment which accompanies permanent overseas bases or large troop deployments."[10] As the AFMS supports the Air Force critical capability of air diplomacy through GHE, it is important to grasp the differences and understand the long-term implications of providing direct care versus building partner capacity.

Strategic Disconnect 1: Providing Direct Care vs. Building Capacity

Providing direct care during health engagements has benefits; however, the AFMS has historically focused more on medical readiness training through Medical Readiness Training

[8] Ibid
[9] 2011 Global Partnership Strategy, pg. 13
[10] Gen John A. Shaud, USAF, Ret. & Adam B. Lowther, *Air Force Strategic Vision for 2020-2030*, Strategic Studies Quarterly, Spring, 2011

Exercises (MEDRETEs) to develop medic preparedness rather than engagements to focus on successfully building long-lasting and sustainable partner nation capacity. According to Air Force Fact Sheet from Joint Task Force-Bravo, "these exercises bring together key members of the U.S. and foreign militaries, U.S. Embassy Country Teams, Non-Governmental Organizations, Host Nation government agencies and local civilian organizations."[11] Additionally, "personnel from active, guard, and reserve components of the U.S. military work side-by-side with their foreign counterparts to include: host nation Ministry of Health, Ministry of Defense, Ministry of Education, non-governmental organizations, bilingual schools and a variety of community members."[12]

In the AFMS, it is very important to provide opportunities for medical professionals to maintain training and readiness skillsets. There is absolutely high value to national interests in conducting a MEDRETE for training purposes only, as MEDRETEs do allow the AFMS to practice and evaluate deployment skillsets while learning how to collaborate with host nation partners.[13] There is also a strategic component to MEDRETEs. Readiness training events can be used to gather critical information from the ground which helps to determine local environmental conditions should U.S. forces ever return on a contingency basis. This type of training allows medics to become acquainted with regionally-specific medical practices. It is not, however, efficient to deploy finite critical resources on health engagement missions solely to maintain these skills, because it generates a strategic disconnect that hinders the achievement of national security objectives to build capacity. When the AFMS places emphasis on providing direct care, this may negatively affect the host nation by not allowing them the opportunity to care for their own patient population. This could make the local government appear weak to their citizens.

[11] Air Force Fact Sheet, Joint Task Force-Bravo, *Medical Readiness Training Exercises (MEDRETE)*, 27 Feb 13
[12] Ibid
[13] Lt Col Jeff Drifmeyer, Toward More Effective Humanitarian Assistance, Military Medicine, Vol 169, Mar 04.

There are historical lessons to be learned from GHEs during the Vietnam and Iraq war that focused on direct care. It is important to briefly review this history so the AFMS can strive to not repeat mistakes of the past. During the Vietnam War, the Medical Civic Action Program (MEDCAP) was implemented and although the U.S. "invested between $500 and $750 million and treated more than 40 million Vietnamese civilians," ultimately the program was considered a failure.[14] One reason for this failure was because rotations were too short, creating a barrier to effectively develop significant relationships with Vietnamese partners. There was no strategic end-state for sustaining the healthcare being provided and worst of all, "Vietnamese physicians believed that they lost face in their community because the presence of foreign teams implied that the foreign doctors had greater skills…and U.S. military medical actions were not identified with the Vietnamese government."[15] These negative perceptions were created in part because the emphasis was on providing direct care and not building capacity.

Years later in Iraq, outcomes similar to Vietnam were witnessed as MEDCAPs were implemented to provide direct care without a sound medical engagement strategy. Eventually in Iraq, after the focus of medical engagement shifted from providing direct care to improving the entire medical system in Tal Afar, there was greater achievement in establishing long-term, sustainable outcomes. Additionally, as the host nation's capacity increased to provide health services to its own community, it began to enhance the legitimacy of the host nation government and build trust.[16] A poor example of GHE in Central America was in 2006, when the USNS Comfort conducted a medical diplomacy mission. During this event, Karen Hughes, advisor to President Bush, described it as being primarily for publicity purposes. In this case, medical providers rendered care for a variety of simple, non-complex patients, but failed to fully utilize

[14] Maj Jay Baker, Medical Diplomacy in Full-Spectrum Operations, Military Review, Sept/Oct 07.
[15] Ibid
[16] Ibid

the capability of the ship to make a long-term difference.[17]

If the AFMS does not have a solid plan to build partner nation capacity, should the engagement really be considered a Phase 0 operation or is it merely a training opportunity for the AFMS' own benefit? When properly planned and executed, building capacity is a more efficient and effective use of medical resources and can reduce the potential for host nation dependency. However, if there is no strategic vision for providing direct care, then the AFMS is indirectly encouraging host nation dependency. Per the guidance provided in Military Medical Ethics, "military exercises specifically in Latin America were to (1) improve readiness of armed forces to deter regional conflict, (2) have a legitimate training benefit for both U.S. forces and those of the host country, and (3) be of obvious benefit to the host country."[18]

Strategic Disconnect 1: Recommendations

Since providing direct care during events such as MEDRETEs does not primarily focus on capacity building, this contributes towards a shortfall which can lend to perceptions that U.S. efforts to provide medical assistance are superficial. Since the AFMS uses MEDRETEs as a vehicle to provide care downrange during exercises, perhaps these training exercises can be merged with capacity building initiatives to better align with the guidance provided in Military Medical Ethics.[19]

The USAF Global Partnership Strategy outlines how helping partner nations build their infrastructure and capability to provide for their own people will promote the legitimacy and increase the stability of that government which will ultimately increase regional stability as

[17] Jean-Paul Chretien, US Military Global Health Engagement since 9/11: Seeking Stability through Health, Global Health Governance, Vol IV, No. 2, Spring 2011.
[18] Military Medical Ethics, Vol 2, Chap 24, "Military Medicine in Humanitarian Missions", 2003, http://www.cs.amedd.army.mil/borden/Portlet.aspx?ID=d25c00de-8284-40bf-8448-72a775fb5110.
[19] Ibid

well.[20] This governmental support will encourage the population to deter relationships with insurgents. Most are familiar with the common phrase, "if you give a man a fish then you feed him for a day, but if you teach a man to fish then you feed him for a lifetime."[21] If the AFMS shows up and only treats several hundred patients for acute symptoms, then only a temporary solution is provided and the underlying condition is not resolved. While it is a great humanitarian act to help those in need, once the AFMS departs the AOR, nothing would have been done to help the country sustain care afterwards. Likewise, they are no more capable to fight alongside the U.S. during a time of conflict.

The emphasis during Phase 0 must focus more on building partner capacity and not simply allowing providers an opportunity to enhance their own practice skills.[22] If the AFMS is going to conduct a MEDRETE in a host nation country, it should take advantage of the opportunity to also build capacity. The AFMS cannot operate in a vacuum of only providing direct care and expect victory down the road. It must strategically provide assistance to countries who have a demonstrated aptitude to absorb mentorship and achieve sustainability which ultimately will support strategic objectives. Certain countries that lack aptitude but remain strategically important to U.S. national security would be an exception. In this situation, Phase 0 operations providing support to maintain positive relationships would supersede efforts to build capacity.

The U.S. SOUTHCOM Strategy, 2016 expresses, "the most important mission we have is to protect our homeland." The U.S. cannot defend the "Approaches" alone. While the AFMS employs a variety of health engagement missions, the Department of State (DOS), the United States Agency for International Development (USAID), and DOD sister services also conduct or

[20] USAF, *Global Partnership Strategy: Building Partnerships for the 21st Century* (Washington: DAF, 2011).
[21] Ibid
[22] Edwin Burkett, Health Engagement in Foreign Internal Defense (FID), Small Wars Journal, 2010.

fund very similar operations within the same regions. It is possible to better leverage these common efforts among the services, Non-Governmental Organizations (NGOs), and Intergovernmental Organizations (IGOs) to employ similar capabilities more effectively, achieve greater synergy, and optimize GHE operations.[23] This requires building effective partnerships with the Interagency, NGOs, and with host nations in the Caribbean, Central, and South America to be successful.[24]

A disconnect that nearly prevents these organizations from effectively working together is how the funding streams are aligned for each organizational mission set and fenced to meet certain criteria/program descriptions before being utilized. There are various types of funding to support Theater Campaign Plan (TCP) and Mission Strategic Resource Plan (MSRP) requirements. These funding streams are used with foreign nations to foster or enhance military-to-military (mil-to-mil) relationships or to increase foreign nation's capacity for coalition partnerships. There are several funding streams available to support GHE, but for the brevity purposes of this paper they will not be discussed in detail. However, the following guidance documents outline the parameters for when and how each of these funding streams can be used. These documents include but are not limited to: the AFMS Defense Health Program Budget Execution Guide, Defense Support to Civil Authorities (DSCA) Campaign Support Plan, USAID Office of U.S. Foreign Disaster Assistance (OFDA) Cable, Policy Guidance for DOD Overseas Humanitarian Assistance Program (HAP), Joint Publication 1-06—Financial Management Support in Joint Operations, and Joint Publication 3-29—Foreign Humanitarian Assistance.[25]

[23] GAO Highlights., Humanitarian and Development Assistance: Project Evaluations and Better Information Sharing Needed to Manage the Military's Efforts, Feb 12
[24] United States Southern Command Strategy, Partnership for the Americas, 2016.
[25] AF/SG8Y, *AFMS Defense Health Program Budget Execution Guide*, Defense Support to Civil Authorities (DSCA) Campaign Support Plan, JP 1-06—*Financial Management Support in Joint Operations*, JP 3-29—*Foreign Humanitarian Assistance*, Policy Guidance for DOD Overseas Humanitarian Assistance Program (HAP), and USAID Office of U.S. Foreign Disaster Assistance (OFDA) Cable.

During this time of constrained resources, it is also important for the DOD to work more efficiently as a joint military force and with interagency partners, to develop coherent mission strategies, and to build a genuine partnership among all civilian, military and coalition partners. The AFMS should work closely with the civilian sector to ensure combined strategic plans of health engagement are complimentary to each other. USAID, the World Health Organization (WHO), and other interagency partners have subject matter experts who would be extremely valuable when working jointly to define strategic health engagement priorities for a host nation. Since these organizations have operated in many of these countries for years, the AFMS should tap into these resources to gather medical intelligence for planning purposes before mil-to-mil engagements begin.[26] "USAID believes the most significant contribution from DOD to the achievement of development goals is long-term, strategic mil-to-mil engagement."[27]

A recommendation would be the AFMS consider focusing more on building long-term capacity with the host nation military through mil-to-mil engagements, preferably utilizing organic, in-place host nation facilities, as opposed to using MEDRETEs with an EMEDS set-up for building capacity. Maximizing the use of host nation facilities fosters sustainability. The AFMS and sister service counterparts should develop greater transparency in reporting mechanisms for assessing GHE missions. This data should be shared and visible within the DOD and also with participating IGOs and NGOs so there is a shared framework from which to operate. When a more collaborative approach is taken for GHE during Phase 0 operations, there will be a greater long-term impact for building capacity, otherwise there ends up being a very ineffective, fragmented approach to providing assistance.

When the U.S. reaches surge capacity during multiple contingency operations, medical

[26] Bruno Himmler, APA Paper on Humanitarian Assistance and Capacity Development: Unifying Efforts of USG Agencies.
[27] USAID Policy on Civilian-Military Cooperation

resources will deplete over time and the AFMS will require international support from partners who have established medical capacity. The U.S. requires international partners capable of assisting themselves and their allies to defeat emerging asymmetrical threats on the battlefield of the future. This coordination over time will provide the foundation necessary to develop and operate global expeditionary medical platforms into the future.

Building capacity should focus on improving the entire host nation health system. This includes focusing on the improvement of everything from public health initiatives to supporting the infrastructure of both local military and civilian healthcare entities.[28] Between 1996 and 2007, the Uniformed Services University researched 1,000 DOD reports involving operations where humanitarian assistance was provided to determine if interventions taken improved health outcomes. Of this fairly large sample there were only 7 cases determined to have improved public health.[29] Public health issues are important to address for solving underlying conditions. For example, distributing deworming medication has no long-term sustainable benefit if the water source is not treated. Focusing to improve public health conditions now is critical, because it has been estimated to take a generation or more to see lasting improvements in this area.[30] GHE efforts should be focusing on controlling communicable diseases, improving sanitation practices, and accessing potable water to enhancing medical logistics, referral process, education and training, and managing financial resources.

When compared to direct care, it can be more cost effective to implement public health initiatives and other activities that seek to solve root issues.[31] As the common phrase in medicine goes, "an ounce of prevention now is worth more than a pound of cure later." When

[28] Edwin Burkett, Health Engagement in Foreign Internal Defense (FID), Small Wars Journal, 2010.
[29] Jean-Paul Chretien, US Military Global Health Engagement since 9/11: Seeking Stability through Health, Global Health Governance, Vol IV, No. 2, Spring 2011.
[30] Laurie Garrett, Foreign Affairs: The Challenge of Global Health, Jan/Feb 2007.
[31] USJFCOM, Emerging Challenges in Medical Stability Operations White Paper, 4 Oct 07.

compared to deploying troops in combat operations, the cost of building capacity is much more affordable. "For the surge in Afghanistan we spent $30 billion to deploy 30,000 troops for 18 months – or $1 million per man."[32] Making an investment today by utilizing the smaller footprint of Phase 0 operations can build capacity in partner nations to defend themselves, thereby helping the U.S. avoid a much larger troop movement in tomorrow's fight against instability.

Strategic Disconnect 2: Use of AARs vs. MOEs

In order for the AFMS to gauge the effectiveness of executing GHE with partner nations, there needs to be established benchmarks to effectively measure the progress of building medical capacity. The AFMS has operated in some of the same countries since before the Vietnam era, attempting to build capacity, yet year after year the AFMS returns to these same countries to "build capacity." What has the AFMS accomplished after all these years when it still returns to the same countries over and over to provide basic medical training? Is the AFMS just merely providing direct care, or has there been successful capacity building the entire time? These questions are difficult to answer accurately, because the AFMS currently has no effective tool for measuring the success of building capacity, except for a collection of After-Action Reports (AARs) that are insufficient for measuring real progress. This leads to the second strategic disconnect of not having adequate Measures of Effectiveness (MOEs) which hinders the AFMS' ability to conduct efficient Phase 0 operations.

After reviewing AARs over a 10 year period between 2004-2014, from GHE in the SOUTHCOM AOR to include the Dominican Republic, Haiti, Suriname, Belize, El Salvador, Peru, Honduras, Guatemala, Colombia, and Chile, it is evident that while this data is useful, it is

[32] James Roberts, Building the Capabilities and Capacity of Partners: Is This Defense Business?, PRISM, Vol 4, No 2, 2013.

not adequate to support effective MOE development.[33] The basic outline for these AARs was fairly standardized and included assessments on pre-planning, deployment, employment, reemployment, and various reports on patient encounters such as total number of encounters, surgical procedures, dental visits, etc. They also include logistics details of the operation such as transportation and lodging arrangements. These assessments overwhelmingly critique how well U.S. medical forces were able to employ their readiness skillsets and collect medical intelligence on local health conditions and the environment. Furthermore, these AARs focused on how AFMS forces performed during deployment to assure U.S. best practices and standards of care were being used and documented appropriately. The MEDRETE AARs seem to fulfill the purpose of a training tool for capturing data similar to what a typical hot wash would for a home station Operational Readiness Exercise (ORE). As mentioned before, this type of data collection on the operational environment is important for future medical missions, but while it serves the purpose of meeting AFMS readiness training requirements it does not greatly benefit the host nation. The data collected from AFSOUTH GHE AARs has not been sufficient alone or aggregated sufficiently to indicate areas for improvement in building host nation capacity.

Strategic Disconnect 2: Recommendations

Although partner nations usually do not have the same appreciation for metrics and MOEs as the AFMS, they are necessary to help medical forces become better advisors, and it allows the AFMS to retain lessons learned to prevent starting from scratch the next time the same country is visited. Effective MOEs also allow the AFMS to save cost by providing insight for how to best reallocate resources more efficiently for future operations.

In developing MOEs for GHE, it is essential for a lead agency to be identified during the

[33] AFSOUTH/SG International Health Specialist (IHS) Knowledge Exchange, Lessons Learned/AARs. https://kx2.afms.mil/kj/kx7/AFSOUTHIHS/Pages/lessons_learned_main_page.aspx

early stages of planning since building capacity involves not only the military, but also interagency partners and the host nation counterparts. The host nation and all stakeholders involved in the planning process should collaborate to set forth measurable objectives that lead to meeting national security objectives. While all stakeholders should be involved and have input during the medical planning process, eventually the host nation will become the owner of the process. Planning for the transition of ownership back to the host nation should be incorporated in the planning process and MOEs to ensure seamless continuity of care. Without effective MOEs, the AFMS will not be able to accurately evaluate the effectiveness of engagement activities or how efficiently finite resources are utilized.

The International Health Specialist Division (SGXI) at Headquarters Air Combat Command (ACC) was recently given the task to develop MOEs for GHE missions. The MOEs being developed are currently in the research and development stage. ACC/SGXI is in coordination with several offices to include the IHS program office, the Defense Institute for Medical Operations (DIMO) and with various country teams to determine the best approach in developing optimal MOEs. Instructions for developing these MOEs specified they be "applicable across the AFMS, across all theaters, and be reproducible and objective."[34] The proposal currently being reviewed is comprised of three major metrics which meets the stated criteria above. The proposed MOE is unique in that it allows for year to year comparison within a country to track progress. The AFMS was not previously capable of tracking such progress with the previously used AAR templates. Additionally, the proposed MOEs will be centered upon specified medical goals and objectives that directly support the combatant commander's desired end states and the overarching strategic country plan. The specific medical goals and

[34] Maj Brian Glodt, Chief of Global Health Training, ACC/SGXI., *MOE Metric Proposal*, personal interview, Jan 14.

objectives will be broken down into Intermediate Military Objectives (IMOs) to gauge capacity building progress over a multi-year period. Furthermore, there will be a tiered approach weighted to reflect the level of existing host nation capacity in conjunction with the country priority level. GHE data will be compared to previous years and "with the expectation that over time more engagements occur within higher complexity tiers."[35] Another unique aspect of this tiered approach is it will allow the AFMS to track and measure a host nation's true progress towards building capacity that is sustainable.

Maintaining effective MOEs for GHE missions during Phase 0 operations will provide the AFMS more reliable data to accurately measure and track the progress for building critical partner capacity. This will provide a more accurate indicator of access and medical capability within the operating environment. As the world faces formidable adversaries in the future, those nations who have already developed capability and strong international partnerships with each other will be much more capable to operate, survive, and achieve victory.

SOUTHCOM AOR: Defending the "Approaches"

The primary goal of a health engagement is to meet national security objectives and support the combatant commander's theater campaign strategy. Phase 0 operations in the SOUTHCOM AOR are vitally important to protecting the U.S. homeland as this region is considered to be in the "Approaches" as depicted in Figure 3.[36]

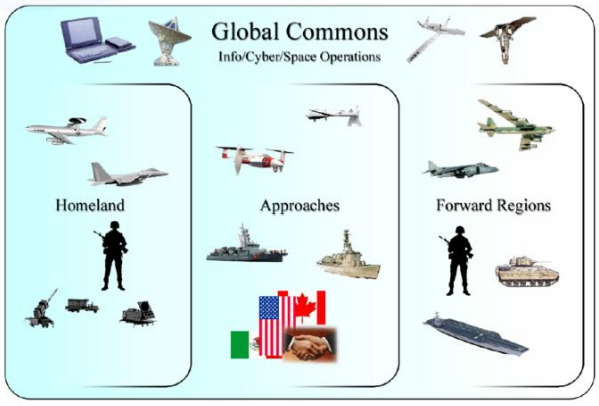

Figure 3: The Global Commons

As part of U.S. National Defense Strategy, there are three main areas U.S. military forces

[35] Ibid
[36] Strategy for Homeland Defense and Civil Support, Department of Defense, Washington, DC, 2005.

operate which compose the global commons. These areas are the homeland, the approaches, and forward regions. Employing forces in all three regions is referred to as having an active, layered defense. The Strategy for Homeland Defense and Civil Support states, "this active, layered defense is global, seamlessly integrating U.S. capabilities in the forward regions of the world, the global commons of space and cyberspace, in the geographic approaches to U.S. territory, and within the United States."[37] One of the key objectives of this strategy is to "deter, intercept and defeat threats at a safe distance."[38] Intercepting and defeating enemies at a safe distance implies the closer a threat becomes, the greater the associated risk will be and the less reaction time U.S. forces will have. Due to the proximity of the Caribbean, Central, and South America to the U.S. homeland, it inherently poses an increased threat to U.S. soil. Therefore, it is imperative to remain aware of current events taking place in this region to ensure the U.S. intercepts enemy forces at a safe distance before they have time to amass size and strength. The U.S. SOUTHCOM Strategy discusses, "countering threats close to their source by maintaining a forward defense combined with fully funded theater security activities with multinational partners."[39] Strengthening regional and U.S. security in the Caribbean, Central, and South America requires active engagement through exercises and educational exchanges.

CNN News reports, since the 1980s, Iran, other foreign governments and terrorist organizations have been actively operating throughout Latin America and have been steadily developing the groundwork for operating and gathering intelligence which could ultimately be used in an attack against the United States.[40] The same article quotes Douglas Farah, a senior fellow at the International Assessment and Strategy Center who mentions, "Hezbollah's presence

[37] Ibid
[38] Ibid
[39] United States Southern Command Strategy, Partnership for the Americas, 2016.
[40] Brice, Arthur, "Iran, Hezbollah mine Latin America for revenue, recruits, analysts say." CNN, 3 Jun 13, http://www.cnn.com/2013/06/03/world/americas/iran-latin-america/.

in Latin America is growing and the organization remains the premiere terrorist organization in the world."[41] Additionally, this article reported, "Iran has more than 80 operatives in at least 12 Latin American nations." Drug trafficking, piracy, and money laundering operations they conduct within Latin America generates funding to support terrorist activity around the globe.[42] Hezbollah has also been known to conduct recruiting operations in Latin America. Some analysts consider the threat of an attack on the U.S. homeland by organizations such as Hezbollah operating in Latin America to be low in the near future. While in the near future this threat may in fact be low on the conflict continuum, this is the prime time to surge Phase 0 operations to create deterrence against terrorist plans from coming to fruition. This is the time to build capacity in fragile states susceptible to the intrusion of crime and inhabitation by terrorist organizations.

The USAF Global Partnership Strategy explains, "nations with weak, failing, or corrupt governments will continue as actual or potential safe havens for an expanding array of non-state actors, breeding conflict and endangering stability." "Terrorist organizations, criminal networks, and international piracy will present unparalleled levels of violence and lawlessness on a global scale, challenging nations' abilities to respond."[43] This is an ongoing problem in the Caribbean, Central, and South America, and is a significant threat the U.S. homeland. Deteriorating health conditions within a fragile state can further contribute to the poverty level, which in turn creates an avenue for non-state actors and insurgencies to flourish. AFMS health engagement during Phase 0 operations can help repair weak and failing states which will lead to a more legitimate government and disrupt the breeding ground for criminal and terrorist activities.

[41] Ibid
[42] Ibid
[43] USAF, *Global Partnership Strategy: Building Partnerships for the 21st Century* (Washington: DAF, 2011).

Anti-Access/Area Denial Barriers to Military Medicine

The U.S. is approaching another turning point in history when it comes to military strategic planning, as the U.S. prepares to face new formidable adversaries in the future. As U.S. forces draw down in U.S. Central Command's area of responsibility, there are other military strategic centers of gravity developing. The challenge faced will be much different than in today's wars. The most notable is perhaps the emerging ways of war within the U.S. Pacific Command.[44] The dilemma the U.S. military faces with adversaries in the pacific is in maintaining the ability to project power and maintain freedom of action within an A2/AD environment. The U.S. will face similar but different A2/AD challenges in the SOUTHCOM AOR. "The primary mission of the Military Health System (MHS) is to provide the continuum of health services across the range of military operations."[45] A2/AD affects U.S. movement into and out of theater (Anti-Access) and also affects maneuver within a theater (Area-Denial). This presents several barriers to how the AFMS projects medical capability within the AOR to support combat forces. A2/AD adversaries in the pacific pose the threat of having advanced jet aircraft, ballistic and cruise missiles, and other weaponry that may signal the AFMS should look at ways for hardening deployed medical capability. The A2/AD environment in any region will present several challenges to positioning medical capability in the AOR. The A2/AD threat to cyberspace would inhibit medical command and control (C2) and have an adverse impact on patient administration functions such as electronic documentation, access to health records, and coordinating AE lift.[46] As a result, there will be a need for more redundant and robust health information systems capability that communicates between services and supports the entire

[44] Shaun Waterman, "New Pacific commander takes on half the world," The Washington Times, 21 Mar 12, http://www.washingtontimes.com/news/2012/mar/21/new-pacific-commander-takes-on-half-the-world/?page=all.
[45] Office of the Secretary of Defense (Health Affairs), *Health Readiness Concept of Operations (CONOPS),* 21 Jan 10.
[46] Brig Gen Bart Iddins. Enroute Care Capability Update, presentation, Aug 13.

continuum of care from point of injury (POI) to definitive care. A2/AD will also allow the enemy to slow deployment of U.S. and allied forces arriving into theater.[47] This negatively affects Rapid Global Mobility and increases AE response time. This also might inhibit the ability of medical forces to successfully move patients from the POI within the "golden hour." When freedom of action is reduced, U.S. forces would be forced to operate from longer distances and with higher levels of risk. This compromises intra-theater, tactical en-route care, and would impede the ability of rescue operations to penetrate the domain to retrieve casualties. Additionally, it will be more difficult to plan the establishment of tactical and strategic air hubs for AE lift, since basing rights during A2/AD contingencies may be uncertain. The way the echelon of care model from POI to definitive care overlays the combat zone, as in Figure 4, within an A2/AD environment will likely function the same as it does now; however, modes of extraction from the battlefield and subsequent patient transportation across the echelon of care thereafter may vary between services when joint capabilities are employed.[48]

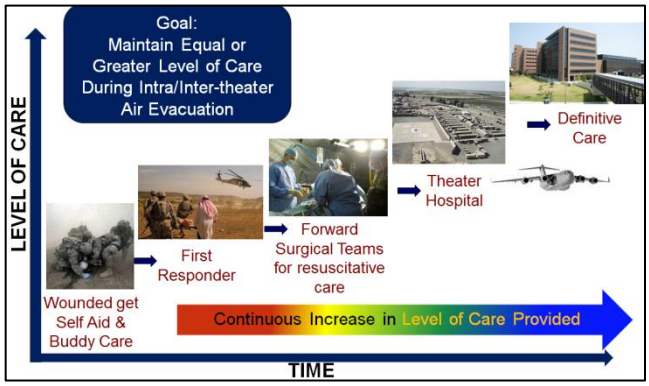

Figure 4: Patient Echelon of Care

According to the 2010 Health Readiness (HR) Concept of Operations (CONOPS), "Maintaining and expanding operational access may require entry of land forces into hostile territory for a number of reasons. These may range from limited-objective attacks, such as raids to eliminate land-based threats to friendly air and naval forces, to seizing a lodgment for a

[47] Air-Sea Battle, Service Collaboration to Address Anti-Access & Area Denial Challenges. Air-Sea Battle Office, May 13, http://airforcelive.DODlive.mil/2013/06/overview-of-the-air-sea-battle-concept/.
[48] Brig Gen Bart Iddins. Enroute Care Capability Update, presentation, Aug 13.

sustained land campaign."[49] When land forces are on the ground it is essential to have a medical presence to support combat power projection. Phase 0 operations provide solutions for gaining operational access and support the laydown for future medical engagement.

A2/AD in SOUTHCOM AOR

A2/AD is not only a threat in the pacific region where certain countries may have advanced technological capabilities and weaponry, but it is also a threat that should be viewed globally as a developing concern. While less developed countries may pose less of an overall threat, they too can still impose A2/AD schemes. As expressed in the 2011 Global Partnership Strategy, "Growing and assertive states are developing anti-access and area-denial capabilities and strategies to constrain United States and international freedom of action while seeking greater influence on the international stage."[50] This would also include transnational organized crime and terrorist organizations operating within the SOUTHCOM AOR. A comprehensive study conducted by the RAND Corporation, published in 2004, provides an overview of A2/AD threats for several regions. Below is an excerpt from this study that identifies A2/AD threats in the Caribbean, Central, and South America.

> The Latin America (Central and South America) and the Caribbean anti-access game presented an opportunity for a brief consideration of a range of potential scenarios relating to the region. In developing these scenarios, we recognized that U.S. forces would face a much more permissive anti-access environment than is found in Southwest Asia, East Asia, or the former Soviet Union. The overall military technological level in the region is low, and many of the conventional militaries of the area are organized and trained primarily for internal security operations. However, the region does host a smattering of malevolent guerrilla and terrorist groups who might choose to employ unorthodox tactics (such as mass hostage seizures) to render access unpleasant for U.S. military forces during any contingency in the next decade.[51]

The potential adversaries within this AOR who have been determined most threatening

[49] Ibid
[50] 2011 Global Partnership Strategy, pg. 12
[51] RAND Corporation Study, *Assuring Access in Key Strategic Regions: Toward a Long-Term Strategy*, 2004

include the Revolutionary Armed Forces of Colombia (FARC), the Colombian Ejército Liberación National (ELN), the Maoist Shining Path movement in Peru, and the Lebanese Hezbollah. While these organizations do not possess the same A2/AD sophistication as U.S. adversaries in the Pacific, there are still many significant barriers that could potentially hinder future medical operations within the Caribbean, Central, and South America. These barriers include limited weaponry such as rockets, mortars, improvised explosive devices (IEDs), and man-portable air defense systems. Furthermore, these asymmetric threats pose a threat to Aerial Points of Debarkation (APODs) and Sea-based Points of Debarkation (SPODs), ambushes along transit routes, and the use of mass hostage seizures.[52]

Building capacity in areas subject to these threats is important to strengthen security cooperation (SC) which will aid in the protection of these APODS and SPODS. The enemy's military capability is somewhat primitive and is not sufficient alone to uphold a military campaign or enforce an A2/AD environment, however, when combining even the basic capabilities they do have with the complex geography and terrain difficulty, it becomes a region much more difficult to penetrate. The enemy can use this to their advantage to significantly disrupt U.S. operations. The potential for attacks along major transit routes would impede the movement of medical assets into and out of certain areas. The RAND study described the environment as, "jungled, mountainous terrain" with "undeveloped road and rail networks in many places."[53] This threat would have an effect on the echelon of care and patient evacuation. If transit routes are compromised, then medical forces would have to resort to more advanced patient movement and evacuation tactics. In such a scenario which creates an anti-access environment via land travel, the use of joint service patient movement that fully integrates

[52] Ibid
[53] Ibid

medevac, AE, and U.S. Navy vessels in the Caribbean, may be the best option for moving patients from the battlefield to definitive care.

Even though it might take current U.S. adversaries in this region decades to develop robust military capabilities, there is always the possibility for other adversarial nations to the U.S. moving in to partner and provide additional combative capability. A hypothetical situation might be in regards to Hezbollah operating within the SOUTHCOM AOR, and being one adversary striving to build their own network to deny U.S. access and threaten U.S. soil. The concept of terrorist organizations being capable of establishing A2/AD networks on the surface may counter traditional thinking, however, when these organizations are resourced and supported by more developed nations such as Iran, the potential for this scenario becomes much more plausible. By shaping the environment through Phase 0 operations and deterring Hezbollah from gaining such an advantage, the U.S. homeland will be better protected.

Venezuela and Cuba are the only states in the region determined to be potential military adversaries to the U.S., however, neither have substantial air or naval capabilities.[54] At a time now when there is a minimal threat of military capability, whether it is actual military or indigenous/nonindigenous guerilla and terrorist groups, is the best opportunity to project Phase 0 operations to shape the environment for the future, before it gradually over time becomes a more sophisticated A2/AD environment. Assisting host nation militaries to build healthcare capacity and a strong medical force will ultimately support the future growth of the rest of the host nation military.

[54] RAND Corporation Study, *Assuring Access in Key Strategic Regions: Toward a Long-Term Strategy*, 2004

Phase 0 Solutions for A2/AD Barriers to Medicine

The AFMS Analytical Framework displayed in Figure 5, shows how Phase 0 objectives are designed to preposition assets and gain access to airbases. This figure shows clinical medicine as a line of effort and GHE as one of the three major lines of operation providing a foundation to patient evacuation and ultimately providing direct support to Air Expeditionary Wings (AEWs). "An adversary who has successfully built a strong network of partnerships throughout and en-route to the region can make gaining operational access extremely challenging."[55] However, proactive health engagement activities occurring years ahead of crises can be the best way to gain access for prepositioning medical assets which then become a catalyst to execution speed when conflict arises. This also allows time to ensure any required measures for hardening are in place. Phase 0 operations also allow for establishing flexible basing versus the hub and spoke method to shorten AE distances and create a dispersal of targets more difficult and costly for the adversary to strike.[56] Additionally, Phase 0 operations to strengthen security cooperation to secure access to airfields, seaports, and land transit routes would be more cost effective where potential threats could be minimized ahead of time.[57] GHE opens the door for developing the capability necessary to deny U.S. adversaries safe haven, deter and disrupt the formation of terrorist networks and prevent various actors of concern from establishing an A2/AD environment within the SOUTHCOM AOR.

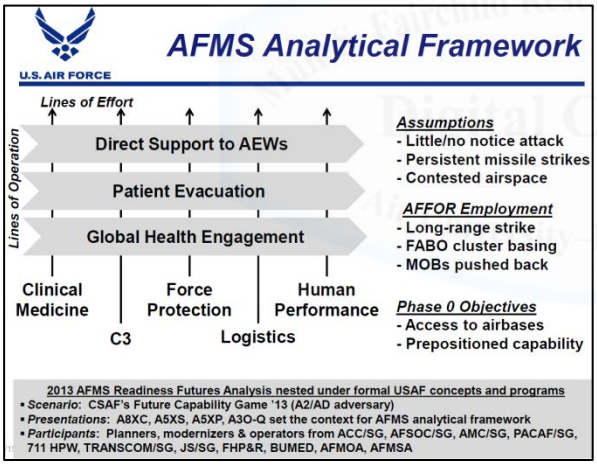

Figure 5: AFMS Analytical Framework

[55] CJCS, Joint Operational Access Concept (JOAC), 17 Jan 12
[56] Lt Col Jeff Alder. The Emerging Way of War: Assessing AFMS Capabilities, presentation, 8 Aug 13.
[57] Col Sean Murphy, Military Health Engagement—Lest We Forget, Military Medicine, Vol. 176, Sept 11.

Conclusion

In conclusion, Phase 0 operations can be expected to move to the forefront of strategic military operations, thus it is important for the AFMS to think strategically on how to best conduct GHE to support the Air Force critical capability of air diplomacy and achieve national security objectives. Resolving the strategic disconnects between providing direct care versus building capacity and establishing effective MOEs will optimize how the AFMS approaches GHE in the SOUTHCOM AOR. Efficient Phase 0 operations will be more capable of supporting long-term strategic objectives such as shaping host nation environments to share the cost and responsibilities of global leadership with nations who embrace the U.S. vision of freedom, stability, and prosperity.[58] Finally, the AFMS needs to train like the AFMS fights for medical capability to succeed in an A2/AD environment. The success of future expeditionary medical operations in an A2/AD environment will ultimately depend heavily on the success of Phase 0 operations and how well each service component can work together jointly with cross-domain synergy and interoperability, as displayed in Figure 6. It is important joint forces be pre-integrated with each other and with the host nation before the fight begins.[59] This will aid in achieving superiority in a combination of domains which will provide the freedom of action required to accomplish the medical mission. Exercises and education should encompass joint training at every opportunity in a way that keeps pace with the emerging ways of war.

Figure 6: Joint Service Interoperability

[58] Ibid
[59] CJCS , Joint Operational Access Concept (JOAC), 17 Jan 12

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